UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,040	12/06/2006	Joachim Nozulak	VAND-0030-US	5957

23550 7590 10/12/2010

HOFFMAN WARNICK LLC
75 STATE STREET
14TH FLOOR
ALBANY, NY 12207

EXAMINER	
CHANG, CELIA C	

ART UNIT	PAPER NUMBER
1625	

NOTIFICATION DATE	DELIVERY MODE
10/12/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

Office Action Summary	Application No.	Applicant(s)	
	10/575,040	NOZULAK ET AL.	
	Examiner	Art Unit	
	Celia Chang	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7-18 and 20-23* is/are pending in the application.

4a) Of the above claim(s) *13-18 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7-12 and 21-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/5/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Amendment and response filed by applicant dated Aug. 5, 2010 have been entered and considered carefully.

Claims 2, 6, 19 have been canceled. Claims 13-18, 20 stayed withdrawn from consideration.

Claims 1, 3-5, 7-12 and newly added claims 21-22 are pending.

2. The rejection of claims 2 and 6 are moot in view of the cancellation of the claims.

The term includes in claim 8, was not amended. If claim 8 is further limitation of claim 7 wherein the salt is made with a pharmaceutically acceptable acid, then, the product of claim 8 "is" a pharmaceutically acceptable acid addition salt. Therefore, the term "is" should be incorporated.

Claims 5-6 and 11-12 are also ambiguous since it is unclear whether they are innate nature of the compound or pharmaceutical composition. If they are essential duplicates, then, duplicate claims are subject to double patenting rejection upon allowance of one set of the claims. It is recommended, the additional duplicate claims be canceled. MPEP 706.12(k). Please note that the amendment made the claims being compound "useful" which is a hybrid format combining both active ingredients and its use. If claims 3-5 are compound claims whether it is being used or not, they are claimed compounds. If the claims are method of use claims, then, target, dosage and site of administration needs to be incorporated to clearly place the process of a method claim.

3. The rejection of claims 7-12 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for employing the process to obtain the compound, does not reasonably provide enablement for "pharmaceutical composition". Please note while pharmaceutical composition of the dependent claims is conventional technique but it is broadening of the base claims and the extra steps of making the composition with additional material are lacking in the base claim. Claim 12 is broadening since the process of claim 7 does

not make a composition. If this is an additional processing step, then it should be in a format of additional step to make a composition.

No amendments were made to the claims. Please note that no "salt" was demonstrated to be operable as a starting material. While acid addition salt can be made from reacting a physiologically acceptable salt to a free base such step is an additional step which is not found in reaction formula II with formula III.

4. The rejection of claims 1-6 (now applicable to 1, 3-5, 21-23) under 35 U.S.C. 103(a) as being unpatentable over Strupczewski et al. US 5,364,866 in view of Corbett et al. p.136, Caccia et al. p.401 or Subramanian et al. (p.559) and Garattini et al. further in view of Bungaard and Waller is maintained for reason of record.

Determination of the scope and content of the prior art (MPEP §2141.01)

Strupczewski et al. '866 disclosed composition of the parent drug iloperidone and its composition which is tantamount to a claim to all its metabolite.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

Corbett et al. Caccia et al. or Subramanian et al. disclosed that the circulating metabolite P88 is active in receptor binding and brain uptake. Further, it is taught by Garattuni that, drug metabolite, if active would be inherently enhancing/prolonging the drug activity, therefore, the free hydroxyl compound is a drug. Bungaard (p.1-3) and Waller (p.498) taught that acylation of a hydroxyl group is routine, conventional prodrug formulation.

Finding of prima facie obviousness---rational and motivation (MPEP§2142-2143)

Therefore, one having ordinary skill in the art in possession of the generically claimed iloperidone would be motivated to isolate the specific "most active" metabolite with the under standing that it is also a "drug". Formulation of a hydroxyl containing drug with an acylated ester is routine, conventional design choice of prodrug formulation.

Therefore, one having ordinary skill in the art in possession of the generically claimed iloperidone having the expectation that its metabolite has the same activity as the iloperidone and has been prolonging or enhancing the antipsychotic activity in situ, would be motivated to isolate the specific "most active" metabolite. The teaching, suggestion and motivation have been well provided by the prior art of record.

Applicants argued that prodrug design is not *always* successful, therefore, one would not be able to predict the outcome of such modification. However, absolute predictability is not required in formulating a rational of obviousness see for example:

Gillet v Johson 16 USPQ2d 1923 at 1927

"*…formulations of the requisite level of suggestion for combining prior art disclosures have been set forth in our precedent. For example, we have said that "[o]bviousness does*

not require absolute predictability of success.... For obviousness under §103, all that is required is a reasonable expectation of success"

In re Kronig 190 USPQ 425
"Obiviousness does not require absolute predictability"

Ex parte Erlich 3 USPQ2d 1011 at 1016
"...one of ordinary skill in the art would have been motivated .....with a *reasonable* expectation of success. Obviousness under 35 USC 103 does not require *absolute predictability..."*

5. The provisional rejection of claims 1-12 (now 1, 3-5, 7-12, 21-23) on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim1-3 of copending Application No. 12/403,735 in view of Corbett et al. p.136, Caccia et al. p.401 or Subramanian et al. (p.559) and Garattini et al. further in view of Bungaard and Waller, is maintained for reason of record.

The same rational as delineated in section 4 is also applicable and hereby incorporated by reference.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

No acceptable terminal disclaimer was filed.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celia Chang, Ph. D. whose telephone number is 571-272-0679. The examiner can normally be reached on Monday through Thursday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet L. Andres, Ph. D., can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OACS/Chang
Sept. 30, 2010

/Celia Chang/
Primary Examiner
Art Unit 1625